

DE 101 51 068 A1

Para. 27:

[0027] A method of adjusting a motor vehicle window glass, moved by a double-wire cable window lifter, with two front, relative to the vehicle travel direction, cable deflection devices arranged along the movement direction of the window glass, two rear, relative to the vehicle travel direction, cable deflection devices arranged along the movement direction of the window glass, a drivable cable, which extends between the two front and rear cable deflection devices along the movement direction of the window glass and in the region between the front cable deflection devices and the rear cable deflection devices in two crossing cable paths and at least one carrier, which can be moved with the window glass and due to the cable along the movement direction of the window glass is characterised in that movable means for the opposing change in length of the crossing cable paths are released from a locking position and the window glass is moved into a maximum upper position in the window aperture of the motor vehicle door or into an end-stop position of an adjusting device, the top edge of the window glass is adjusted by setting the means for the opposing change of length of the crossing cable paths and the spatial position of the set means for the opposing change of the length of the crossing cable paths is again locked.

Para 43:

[0043] For lowering the front carrier 11 from the position shown by a continuous line into the position shown dotted, cable deflection elements 51, 52 are arranged in the region of the crossing cable paths 23, 24, said deflection elements acting on the diagonal cable 23 or the retrieving cable 24 in a suitable manner such that, to lower the front carrier 11, the diagonal cable 23 is shortened and the retrieving cable 24 is lengthened by an equal amount. The cable deflection elements 51, 52 illustrated in Fig. 2 are formed for translatable adjustment, i.e. they act in the direction of the double arrows A and B on the diagonal cable 23 and the retrieving cable 24 such that in the raised position of the front carrier 11 the crossing cable paths 23, 24 run on the continuous line, whereas in the lowered position of the front carrier 11 the dashed trace of the crossing cable paths 23, 24 occurs.

Para 44:

[0044] Of the translatable displaced cable deflection elements 51, 52, the cable deflection element 51 acting on the diagonal cable 23 is formed as an adjustable actuator, whereas the cable deflection element 52 acting on the retrieving cable 24 is formed as a spring-loaded cable deflection element which establishes the opposing cable length compensation. If, accordingly, the diagonal cable 23 is extended by the cable deflection element 51, the retrieving cable 24 is shortened by the same length, because the tensile force of the cable 2 acting on the spring-loaded cable deflection element 52 causes a corresponding compensating movement of the cable deflection element 52 in the direction of a cable length reduction of the retrieving cable 24.

Para. 62, lines 44 to 63:

[0062] ... For setting the position or alignment of a window glass moved by a double-wire cable window lifter illustrated in Figs. 2 to 8, the respective cable deflection elements or cable deflection devices or the device for changing the length of the Bowden sheaths are released and then the window glass is moved into the maximum upper position, i.e. up to the end-stop on the top edge of the window glass aperture of a motor vehicle door or alternatively into the end-stop position of an adjustment device. In this position of the top edge of the window glass the cable deflection elements, cable deflection devices or devices for changing the length of the Bowden sheaths are appropriately adjusted such that the crossing cable paths 23, 24 change opposingly in their length or the length of the Bowden sheaths 81, 82 is opposingly changed. After termination of this adjustment the spatial position of the cable deflection elements, cable deflection devices and devices for changing the length of the Bowden sheaths is fixed and therefore parallel pulling of the window glass is ensured.

Claims 1, 4 and 5:

1. Device for setting a window glass moved by a double-wire cable window lifter on a motor vehicle, with two front, relative to the vehicle travel direction, cable deflection devices arranged along the movement direction of the window glass, two rear, relative to the vehicle travel direction, cable

deflection devices arranged along the movement direction of the window glass, a drivable cable, which extends between the two front and rear cable deflection devices along the movement direction of the window glass and in the region between the front cable deflection devices and the rear cable deflection devices in two crossing cable paths and at least one carrier, which can be moved with the window glass due to the cable along the movement direction of the window glass, is characterised in that the length of the two crossing cable paths (23, 24) can be changed opposingly with respect to one another.

4. Cable window lifter according to Claim 2 or 3, characterised in that the means (51-59) for changing the length of the crossing cable paths (23, 24) are formed such that they are spring-loaded in at least one of their movement directions.
5. Cable window lifter according to at least one of the aforementioned claims, characterised in that the spatial position of the means (51-59) for changing the length of the crossing cable paths (23, 24) can be fixed.